

**LEMON GROVE CITY COUNCIL
AGENDA ITEM SUMMARY**

Item No. 2
Mtg. Date March 20, 2018
Dept. Public Works

Item Title: Lemon Grove Avenue Realignment Project

Staff Contact: Mike James, Assistant City Manager / Public Works Director

Recommendation:

Adopt a resolution (**Attachment B**) approving the revised scope of work and project budget for the Lemon Grove Avenue Realignment Project.

Item Summary:

On March 6, 2018, the City Council received a report from staff regarding the Lemon Grove Avenue Realignment Project (LGA Realignment Project). During the presentation and ensuing discussion the Council requested additional information be brought back for discussion regarding the estimated cost increase in the sewer revenues from \$200,000 to \$475,000.

The staff report (**Attachment B**) includes a narrative of what the specific changes were and concludes with staff's recommendation to approve the revised scope of work and project budget for the LGA Realignment Project.

Fiscal Impact:

If approved the following three financial actions will be taken:

1. The contract with WCG will increase in an amount not to exceed \$759,000, and
2. The agreement with IEC will increase in an amount not to exceed \$67,080, and
3. The agreement with Rick Engineering for project management will increase in an amount not to exceed \$77,000.

Environmental Review:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Not subject to review | <input type="checkbox"/> Negative Declaration |
| <input type="checkbox"/> Categorical Exemption, Section [] | <input type="checkbox"/> Mitigated Negative Declaration |

Public Information:

- | | | |
|--|---|---|
| <input checked="" type="checkbox"/> None | <input type="checkbox"/> Newsletter article | <input type="checkbox"/> Notice to property owners within 300 ft. |
| <input type="checkbox"/> Notice published in local newspaper | <input type="checkbox"/> Neighborhood meeting | |

Attachments:

- | | |
|-----------------|---|
| A. Staff Report | C. LGA Realignment Project Budget Summary |
| B. Resolution | D. Sewer Cost Summary |

LEMON GROVE CITY COUNCIL STAFF REPORT

Item No. 2

Mtg. Date March 20, 2018

Item Title: **Lemon Grove Avenue Realignment Project**

Staff Contact: Mike James, Assistant City Manager / Public Works Director

Background:

The Lemon Grove Avenue Realignment Project (LGA Realignment Project) is the City's single largest construction project that originated more than a decade ago in preliminary design. When sufficient grant funds were applied for and awarded to the City, staff was able to begin construction on this project in 2016. As detailed in the background portion of this staff report, on June 21, 2016 the City Council awarded a construction contract to WCG in an amount of \$5,506,461.19. The estimated timeline to complete the project was 12 months or July 2017. Since construction began there have been a number of events that impacted the scope of work, project timeline, and project budget, all of which are detailed in the section.

Scope of Work

As a summary, this project consists of grading, roadway modifications to the off-ramp, installation of curb, gutter, sidewalks and driveways, sewer and water main relocations, new street lighting, new traffic signals, traffic signing and striping, landscape and irrigation, railroad signaling and grade crossing improvements, railroad overhead contact system modifications, and pavement restoration. While not desired but fully expected, there were several events that occurred in the field that required project change orders. Up to this point in the project many of the costs fell within the established contingency originally approved. However, the most recent change orders now will place the project costs more than the established contingency and now staff is requesting that the City Council review the change order summary (shown below) with the recommendation that each be approved. By approving the change orders and new project budget, staff will be able to continue forward progress to complete the project by Spring 2018.

Change Order Summary:

Attachment C outlines all revenues and estimated expenditures to complete the project. Contained in that table are eight changes to the original contract that either decreased or increased the project budget. Those changes are detailed below:

- WCG CO 1 – Street Furnishings: This item removed street furnishings that were located on North Avenue. Due to the segregation of the realignment project from the undergrounding project, staff felt that it would not be the appropriate time to include those items until both projects are completed. Impact: Cost decrease by \$10,104.
- WCG CO 2 – Grading Impacted Soil (Past Work): When the project was designed the original plan was to allocate a portion of the total soil on-site as impacted. The cost to manage impacted soil versus non-impacted due to on-site inspections and laboratory testing. However, it was noted that once the contractor began work rather than a portion of the soil on-site being impacted, all the soil on-site was impacted and required additional work to properly manage the required earthwork. This additional work was unforeseen by staff, yet it was necessary to continue to move forward to complete the project. Impact: Cost increase of \$471,809.

Attachment A

- WCG CO 3 – Sewer Jack & Bore: Due to the presence of an unforeseen concrete encasement surrounding the existing sewer main beneath the MTS tracks, the tunneling operation originally intended to be used to replace that line had to be modified to include "hand tunneling" operations which represented a change in work. Impact: Cost increase of \$110,653.
- WCG CO 4 – Grading Impacted Soil (All Future Work): During the development of CO 2, there is still a portion of soil that must be managed as a part of the final phase of the construction project. The process that was used to negotiate the cost to manage the impacted soil in CO 2 was used to negotiate with the contractor to also account for any future earthwork to complete the project. Impact: Cost increase of \$159,545.
- WCG CO 5 – MTS Insurance Costs: With the project duration exceed what was originally planned, the insurance requirements for MTS right of way permits have been increased since the project began. This item represents the increase in insurance premiums for the higher limits currently required by the new MTS permit. Impact: Cost increase of \$11,500.
- WCG CO 6 – Retaining Wall: Following the installation of sidewalk along the north east corner of Olive Street and North Avenue it was determined that a small retaining wall would need to be added to stabilize the foundation and driveway of the adjacent property. This item represents an agreed upon lump sum price to perform this additional work. Impact: Cost increase of \$15,372.
- Infrastructure Engineering Company (IEC) – CO 1 – Additional Inspection Work: Due to the changes that are listed above, the amount of time that IEC has spent on site, working with WGC and coordinating information/permits/meetings with all utilities has increased. As such, the original scope of work presented by IEC has increased. This change order will budget an amount that will allow IEC to complete all construction management services until the project is completed. Impact: Cost increase of \$67,080.
- Rick Engineering – CO 1 – Additional Project Management Services/Undergrounding: Rick Engineering has provided project management services for the city since this project began. Originally, staff intended to use the same project manager to also assist with the overhead utilities undergrounding project because it should have occurred at the same time. However, with the undergrounding project now delayed until after the realignment project is completed, additional funding is now required to coordinate work with AT&T, Cox Communication and AT&T for an estimated two-year period until the undergrounding project is completed. Impact: Cost increase of \$77,000.

Realignment Project Separated from the 20A Overhead Utility Undergrounding Project.

Staff wanted to also provide a summary of the overhead utility undergrounding project which will occur in the same area as the realignment project. In April 2017, staff advertised a construction bid to underground all overhead utility facilities in the realignment project area as well as heading east on north avenue. Unfortunately, all bids received exceeded the franchise utility company's engineer's estimate for the City to manage the project. Staff approached AT&T, Cox Communications and SDG&E to inquire if each entity would be willing to increase each of their respective cost estimates to allow the city to award a construction project. The difference in cost that would have to have been absorbed by the utility companies totaled approximately \$140,000. The utility companies were not able to amend their cost estimates. That left staff with only one option to complete the realignment project and turn the undergrounding project over to SDG&E to now manage and complete as one of its own

Attachment A

projects. Staff has met with the utility companies and the anticipated work to redesign the project, advertise, award, and construct is estimated to take 18 months. Staff estimates that this project will begin after the realignment project is complete, however, a definitive timeline is not available at the time this staff report was prepared. Staff will continue to monitor the undergrounding project and, as previously detailed, there will be a project manager that will continue to be the liaison with SDG&E to make the overhead utility undergrounding project a priority project.

Timeline

The original construction timeline when the project was awarded to WCG was 12 months. As noted in the previous section of this staff report, staff has experience several financial changes that negatively impacted the project budget. In addition to the financial impacts there are many reasons as to why the timeliness of the project was delayed. Those reasons are detailed below.

- *Caltrans*: Caltrans requested changes to the phase 2 traffic control plans. These changes were requested to minimize the disruption of detouring outgoing Lemon Grove Avenue traffic around and through La Mesa to access the Hwy 94 on and off ramps.
- *Helix Water District*: After plan approval, Helix required significant changes be made to the original water main plans which impacted the critical path for completion while revisions were created, reviewed and approved prior to constructing.
- *SDG&E*: Service orders for the electrical work were not issued because SDG&E was waiting to approve all work for the realignment and overhead utility undergrounding project simultaneously. A significant amount of time was required to get SDG&E to segregate the two projects and receive the necessary approvals just for the realignment project. This also caused all traffic signal work to be delayed until electrical service could be established.
- *Sewer Line Jack and Bore*: A concrete encasement around the existing sewer main was discovered while working underneath the MTS tracks. This resulted in the only course of action to hand tunnel with jack hammers.
- *Rain Events*: When the project was in the mass grading phase of construction there were significantly heavy rain events. Work was impacted by each individual rain event and each was amplified due to the saturate nature of the soil on site. The site was shut down for extended periods of time while the existing grade dried sufficiently to then be worked on. Furthermore, the rain also caused similar problems when exporting soil from the site.

With information available at the time this staff report was drafted, staff anticipates that the realignment project will be completed in Spring 2018. To error on side of caution, staff recommends that the current contract with WCG is extended through June 2018. During which time staff will continue to work closely with IEC (the City's construction management contractor) who performs work on-site daily. Staff remains cautiously optimistic that the project will continue forward progress and it will be completed this spring.

Budget

As noted in **Attachment C**, staff created a table that compared the original project budget of \$6.3 million to the revised project budget of \$7.2 million. As previously noted, each change order (detailed in a previous section of this staff report) were necessary actions to continue forward progress on this project. The city's project team (IEC, Rick Engineering, and the Engineering Division) has worked closely with the contractor to negotiate all costs which are now the most current cost estimates that staff recommends the City Council approve to complete the project. To date, all change orders, construction inspection costs, and project management costs will

Attachment A

increase the project costs by an amount not to exceed \$903,080. The specific breakdown of the increases are \$759,000 for WCG, \$67,080 for IEC, and \$77,000 for Rick Engineering.

Discussion:

On March 6, 2018, the City Council received a report from staff regarding the LGA Realignment Project. During the presentation and ensuing discussion, the City Council requested additional information regarding the estimated sewer revenue increase from \$200,000 to \$475,000. That information is shown in **Attachment D**. A description of some of the key costs are noted in the summary shown below:

- 8.6 Percent Project Allocation: Because the Sanitation District is funding a portion of the LGA Realignment Project there are aspects of the total project that should be allocated to the District. Line items 1 and 3-11 have all general application to the total project. The 8.6 percent was used because it represents the proportion of sewer related items when compared to the total project scope of work bid to the contractor.
- Sewer Tasks: Line items 58-63 are all items that were included in the original bid document that were specifically sewer related tasks. This items total approximately \$194,451.00.
- Jack and Bore Change Order: As discussed during the initial presentation when the contractor encountered the concrete casing that caused additional work via time and materials to be performed to complete the project. This was estimated as a lump sum cost estimate and the length of concrete that was removed by hand was estimated to be 30 feet. When originally planned, the design firm confirmed that the as-builts showed the sewer pipe was made from clay (early 1900's). However, this was not the case and when the jack and bore project began it was discovered that the pipe was cast iron. In this segment of pipe the pipe was a different material and the conditions around the pipe were different than what was found on the plans.



Attachment A

- Cost Differential: Since the March 6th meeting there were two revenue line items that increased. The first account is the RTCIP fund that increased by \$5,316 from \$557,900 to \$563,216. The increase was due to an account reconciliation process and when additional funds that were deposited since the last report was created. The second account is the sanitation district revenue fund. This amount increased by \$3,693 from \$475,000 to \$478,693.62. The increase is due the \$475,000 initial estimate that was updated with detailed cost estimate provided by the construction manager. Overall the total increase change in revenues equals \$9,009.62 from the March 6th presentation. |

Conclusion:

Staff recommends that the City Council adopts a resolution (**Attachment B**) approving the revised scope of work and project budget for the Lemon Grove Avenue Realignment Project.

Attachment B

RESOLUTION NO. 2018 -

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LEMON GROVE, CALIFORNIA APPROVING THE REVISED SCOPE OF WORK AND PROJECT BUDGET FOR THE LEMON GROVE AVENUE REALIGNMENT PROJECT

WHEREAS, the Lemon Grove Realignment Project was scheduled as a part of the city's five-year capital improvement program; and

WHEREAS, an agreement was awarded to West Coast General Corporation and established a project budget not to exceed \$6,310,300; and

WHEREAS, since the projects inception there have been several unforeseen events that delayed work and increased project costs; and

WHEREAS, it is necessary to increase the project budget and specific contract and agreement costs to mitigate the project delays and change orders; and

WHEREAS, the City Council finds it in the public interest that the recommended scope of work, budget and timeline are amended to allow West Coast General Corporation to complete the construction project. |

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Lemon Grove, California hereby:

1. Establishes a project budget not to exceed \$7,289,708.62; and
2. Establishes a project timeline not to exceed June 2018 for the Lemon Grove Realignment Project; and
3. Authorizes the City Manager or designee to execute all amendments and manage all project documentation. |

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Attachment C

Lemon Grove Avenue Realignment Project Budget Summary

| Revenues | Approved Revenues | Requested Revenues | | Expenditures | Approved Expenditures | Requested Expenditures |
|-------------------------------|--------------------|-----------------------|--|-----------------------------------|-----------------------|------------------------|
| SGIP Fund | \$805,000 | \$805,399 | | West Coast General | (\$5,506,461) | (\$5,506,461) |
| CDA – Gen Bond (Fund 64) | \$1,800,000 | \$1,900,000 | | CO 1 – Street furnishing | | \$10,104 |
| CDA – IIG (Fund 58/63) | \$1,560,000 | \$1,560,000 | | CO 2 – Impacted soil (past) | | (\$471,809) |
| TDA (Fund 10) | \$237,400 | \$237,400 | | CO 3 – Sewer J & B | | (\$110,653) |
| Street Reserve (Fund 3) | \$150,000 | \$159,000 | | CO 4 – Impacted soil (future) | | (\$159,545) |
| TransNet (Fund 14) | \$1,000,000 | \$1,586,000 | | CO 5 – MTS insurance | | (\$11,500) |
| RTCIP (Fund 27) | \$557,900 | \$563,216 | | CO 6 – Retaining Wall | | (\$15,372) |
| Sanitation District (Fund 16) | \$200,000 | \$478,693.62 | | BV/NV5 Design | (\$117,582) | (\$117,582) |
| | | | | IEC | (\$384,766) | (\$384,766) |
| | | | | CO 1 – Project Extension | | (\$67,080) |
| | | | | Rick Engineering | (\$153,282) | (\$153,282) |
| | | | | CO 1 – Project Ext./20A | | (\$77,000) |
| | | | | PRE (Rail Signaling System) | (\$38,064) | (\$38,064) |
| | | | | HNTB (Cons. Ins. Catenary) | (\$13,884) | (\$13,884) |
| Total Revenues | \$6,310,300 | \$7,289,708.62 | | Total Expenditures | (\$6,214,039) | (\$7,116,894) |
| | | | | Difference in Rev. v. Exp. | | \$172,814.62 |

LGA Realignment Sewer Cost Summary

| ITEM | BASE BID DESCRIPTION | Contract Authorization | | | |
|-------|---|------------------------|--------------|-------|---------------------|
| | | Unit | Price | Qty | Extension |
| 1 | Mobilization (10% Max) | LS | \$60,800.00 | 0.086 | \$5,228.80 |
| 3 | Stage Construction and Traffic Control | LS | \$165,380.00 | 0.086 | \$14,222.68 |
| 4 | Water Pollution Control | LS | \$65,818.00 | 0.086 | \$5,660.35 |
| 5 | Impacted Soil Health and Safety / Soil Management Plans | LS | \$9,985.00 | 0.086 | \$858.71 |
| 6 | Existing Utility Pole Protection | LS | \$5,255.00 | 0.086 | \$451.93 |
| 7 | Construction Project Information Signs | EA | \$841.00 | 0.086 | \$72.33 |
| 8 | Surveying | LS | \$33,296.00 | 0.086 | \$2,863.46 |
| 9 | Shoring and Bracing | LS | \$65,162.00 | 0.600 | \$39,097.20 |
| 10 | Changeable Message Boards | EA | \$7,357.00 | 0.086 | \$632.70 |
| 11 | Clearing and Grubbing | LS | \$125,174.00 | 0.086 | \$10,764.96 |
| 58 | 10" PVC Sewer Main | LF | \$263.00 | 494 | \$129,922.00 |
| 59 | 8" PVC Sewer Main | LF | \$42.00 | 60 | \$2,520.00 |
| 60 | Install 60-inch diameter Sewer Manhole (PVC Lined) | EA | \$17,867.00 | 1 | \$17,867.00 |
| 61 | Install 60-inch Sewer Manhole (PVC Lined) | EA | \$17,867.00 | 2 | \$35,734.00 |
| 62 | Abandon Sewer Manhole | EA | \$2,102.00 | 1 | \$2,102.00 |
| 63 | Connect to Existing Manhole | EA | \$3,153.00 | 2 | \$6,306.00 |
| 64 S | Jacked and Bored 18" Steel Sewer Casing | LF | \$1,366.00 | 112 | \$152,992.00 |
| CCO 1 | Jack and Bore Additional Costs Per PCO 17R1 | LS | \$51,397.50 | 1 | \$51,397.50 |
| | SUBTOTAL Sewer Associated Costs | | | | \$478,693.62 |